New Technologies

Panelists

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NGV Technology Forum

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Enabling Cleaner Engine Technologies

- Infrastructure Developments
- Path to Hydrogen
- Fuel Blends
- Natural Gas/Hybrids

Path to Zero Emission Vehicles

Photo Courtesy of Athens OH Historical Archives

1920's

Photo Courtesy of Phillips Petroleum Company

Path to Zero Emission Vehicles

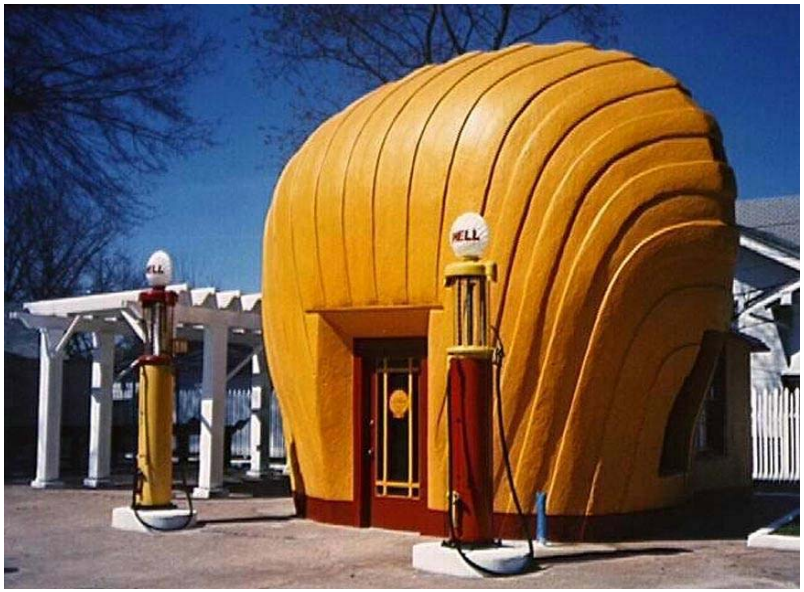


Photo Courtesy of National Park Service

1930's

1950's

Photo Courtesy of Florida Historical Society

Path to Zero Emission Vehicles

Photo Courtesy of Phillips Petroleum Company

1960's

Photo Courtesy of Phillips Petroleum Company

Today

Path to Zero Emission Vehicles

Photo Courtesy of ENRG Fuels

Natural Gas
and
Other Alternative Fuels

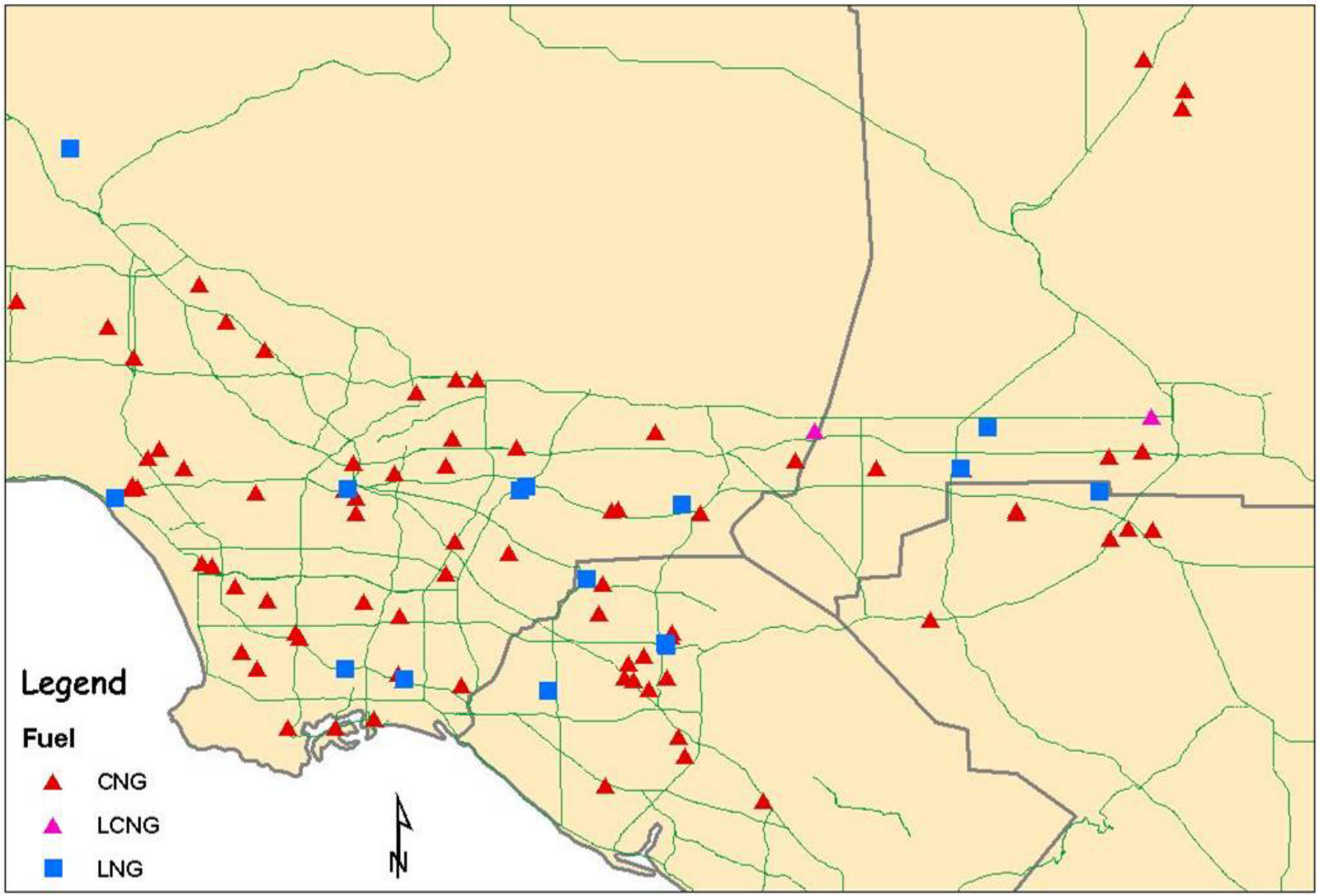
Hydrogen/
Fuel Cell

Photo Courtesy of American Honda

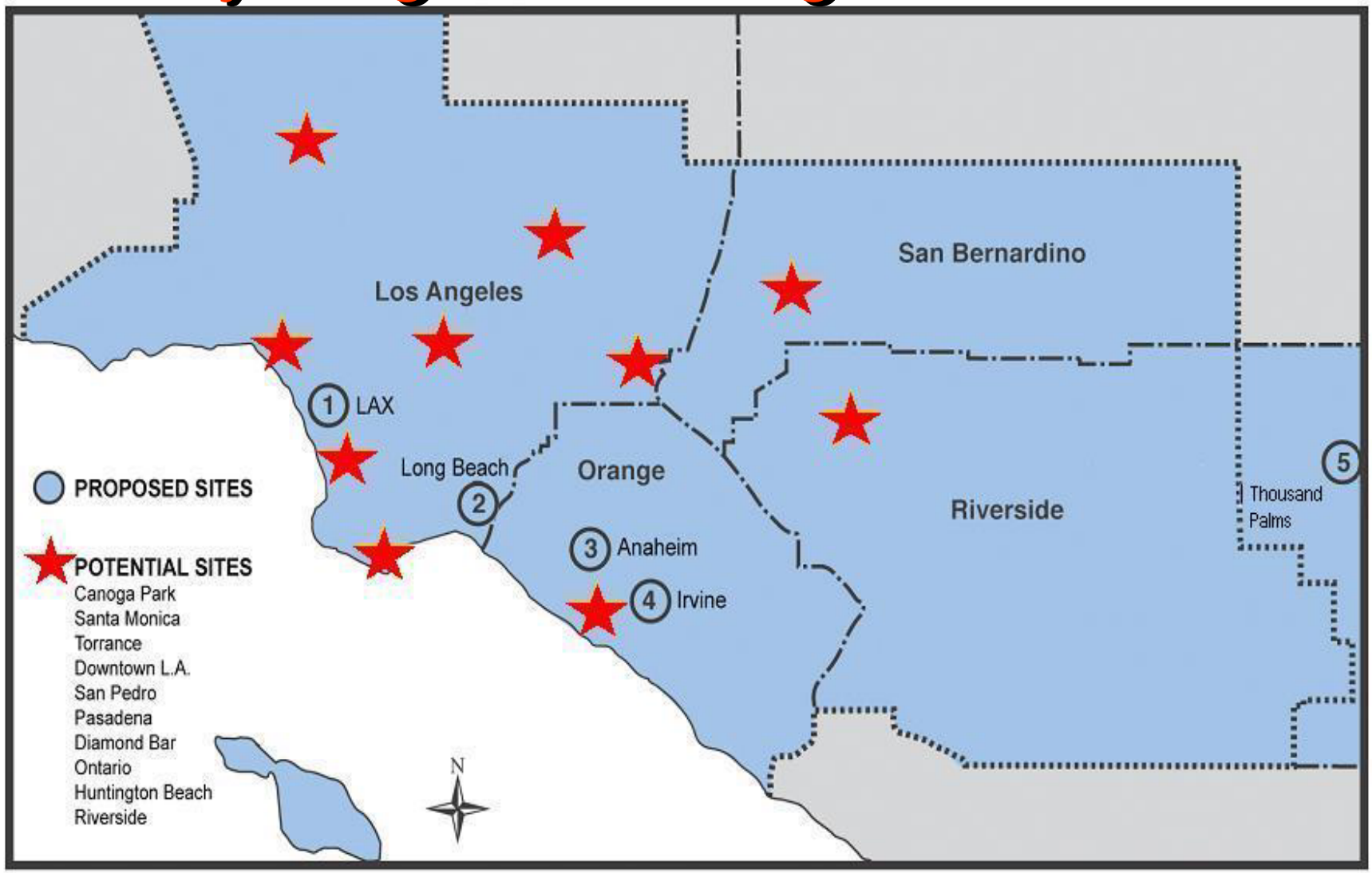
Natural Gas Refueling Infrastructure Transition to Hydrogen

- Existing Natural Gas Refueling Infrastructure Could Serve as Future Hydrogen Refueling Infrastructure
- To Extent Possible, Install Equipment that are “Hydrogen Compatible”
- Research/Develop Technologies to Enable Use of Existing Stations

Natural Gas Fueling Facilities



Proposed and Potential Hydrogen Fueling Stations



Current SCAQMD Projects

- Demonstrate Two H_2/CNG Fuel Blend Transit Buses (NREL, SunLine, Cummins Westport)
- Develop A Step-by-Step Procedure For Conversion of an Existing CNG Station to Hydrogen Fueling Service (Sunline Services)
- Build And Demonstrate Vehicles With Dual Use Fuel Tanks (CNG/LNG and Liquid/ Compressed Hydrogen)
  (SCI, Lawrence Livermore, Sunline)

Potential SCAQMD Projects

- CNG Home Refueling Project Includes Components and Design for Conversion to Future Hydrogen Service
- Demonstration of CNG Refueling Station Converted to Allow H_2/CNG Fuel Blends and Hydrogen Vehicle Fueling

Integrated H_2/Fuel Cell Concept